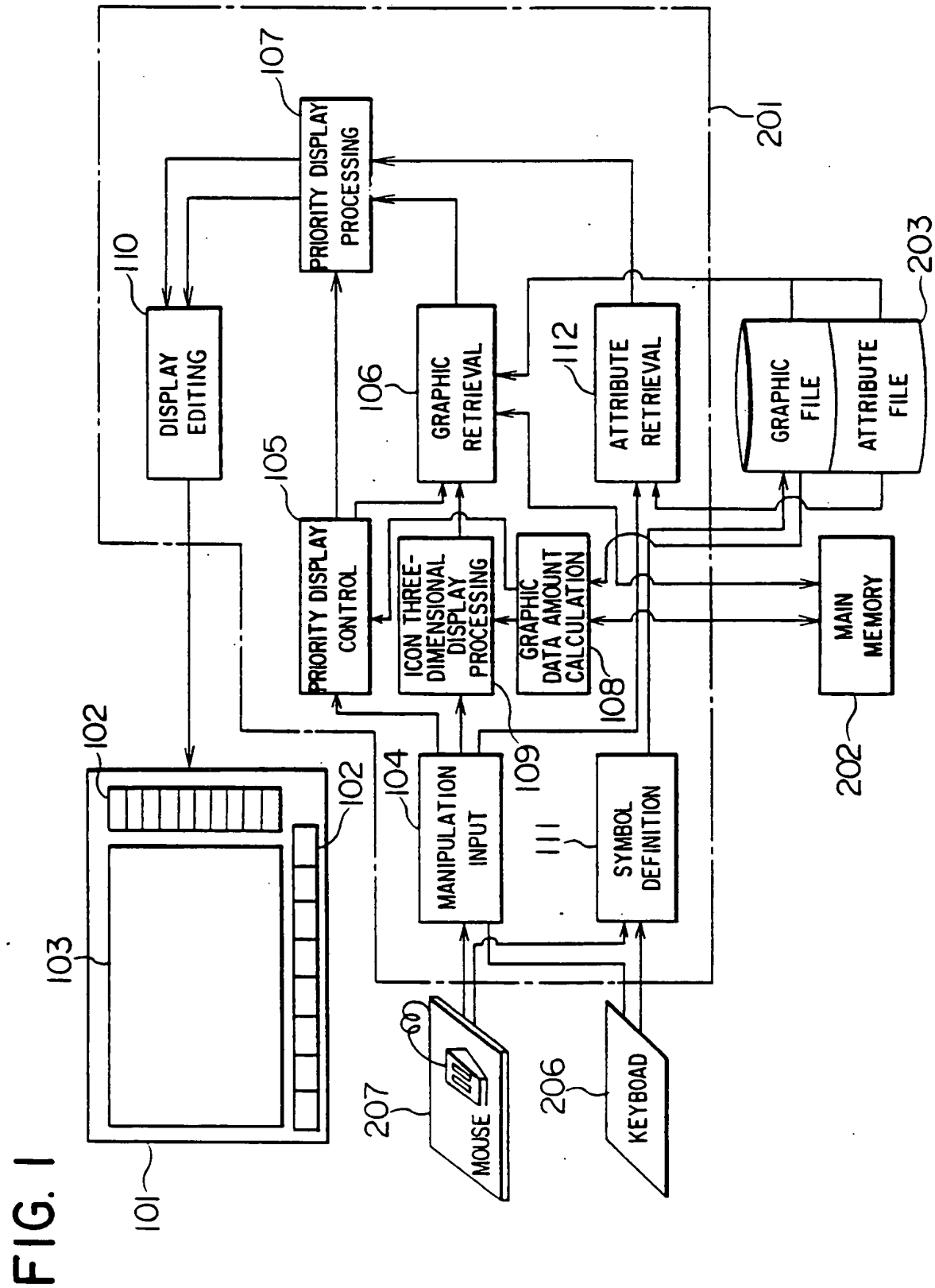
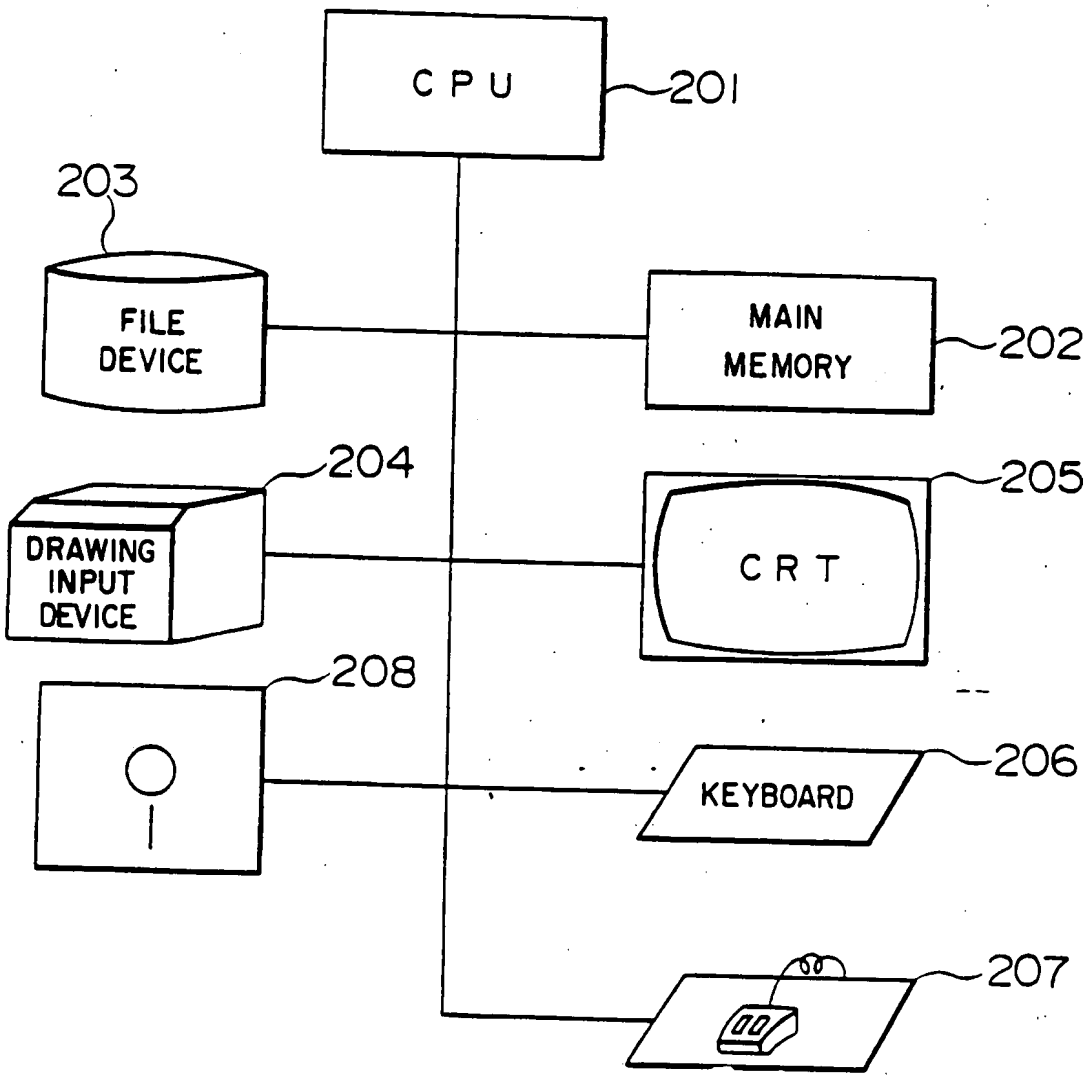

201
107
PRIORITY DISPLAY PROCESSING
110
DISPLAY EDITING
106
GRAPHIC RETRIEVAL
112
ATTRIBUTE RETRIEVAL
203
GRAPHIC FILE
ATTRIBUTE FILE
105
PRIORITY DISPLAY CONTROL
ICON THREE-DIMENSIONAL DISPLAY PROCESSING
GRAPHIC DATA AMOUNT CALCULATION
108
MAIN MEMORY
202
102
102
104
MANIPULATION INPUT
109
111
SYMBOL DEFINITION
103
207
MOUSE
206
KEYBOAD
101

FIG. 1

FIG. 2


CPU
201
203
FILE DEVICE
MAIN MEMORY
202
204
DRAWING INPUT DEVICE
205
CRT
208
KEYBOARD
206
207

93 7439

FIG. 3A

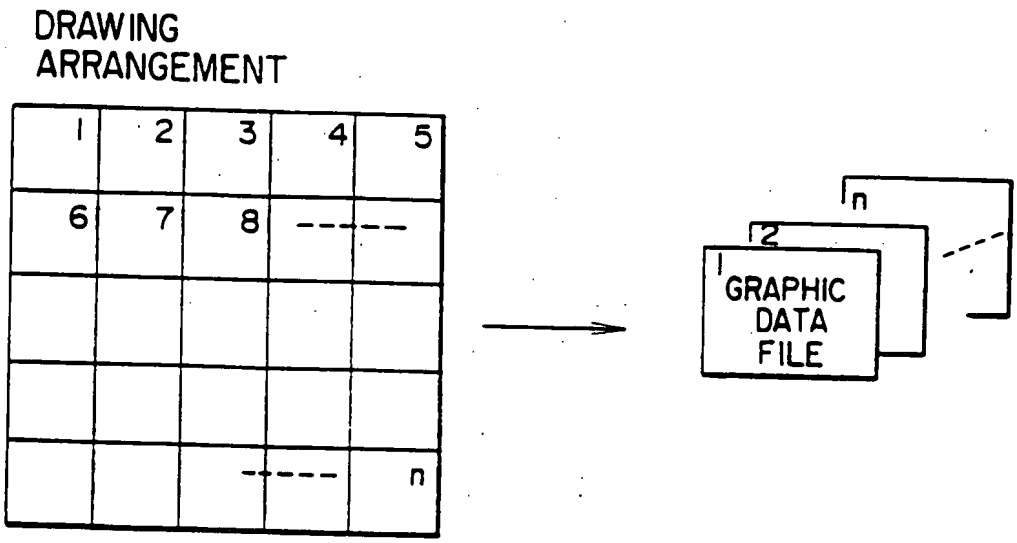


FIG. 3B

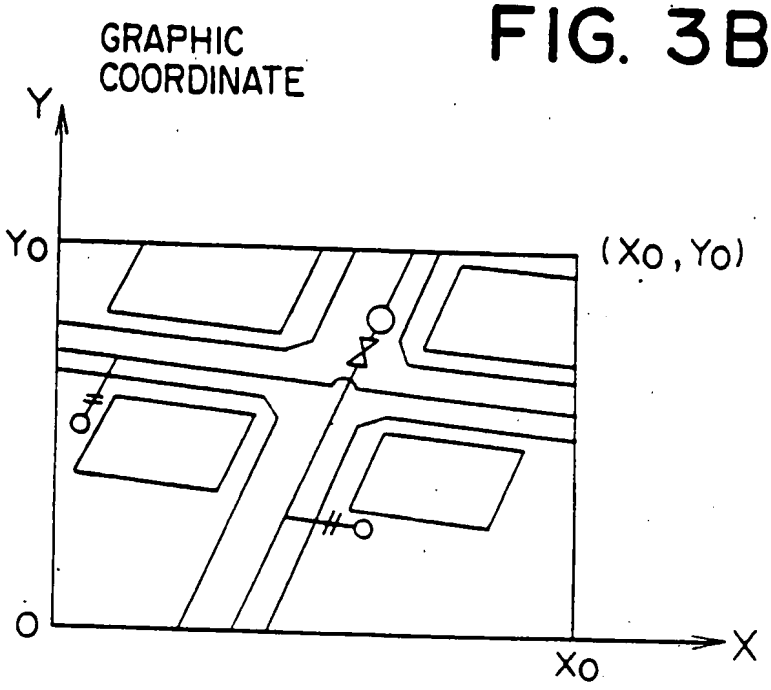


FIG. 4A

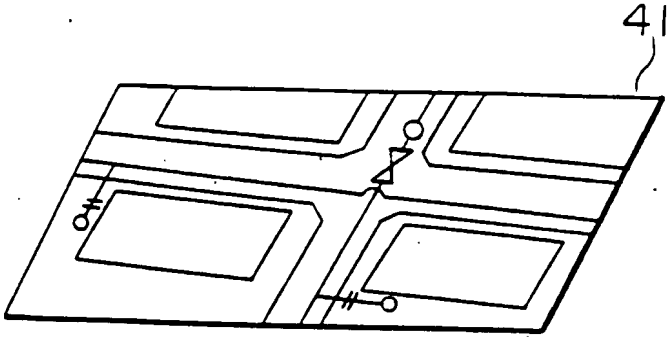


FIG. 4B

FIG. 4C

FIG. 4D

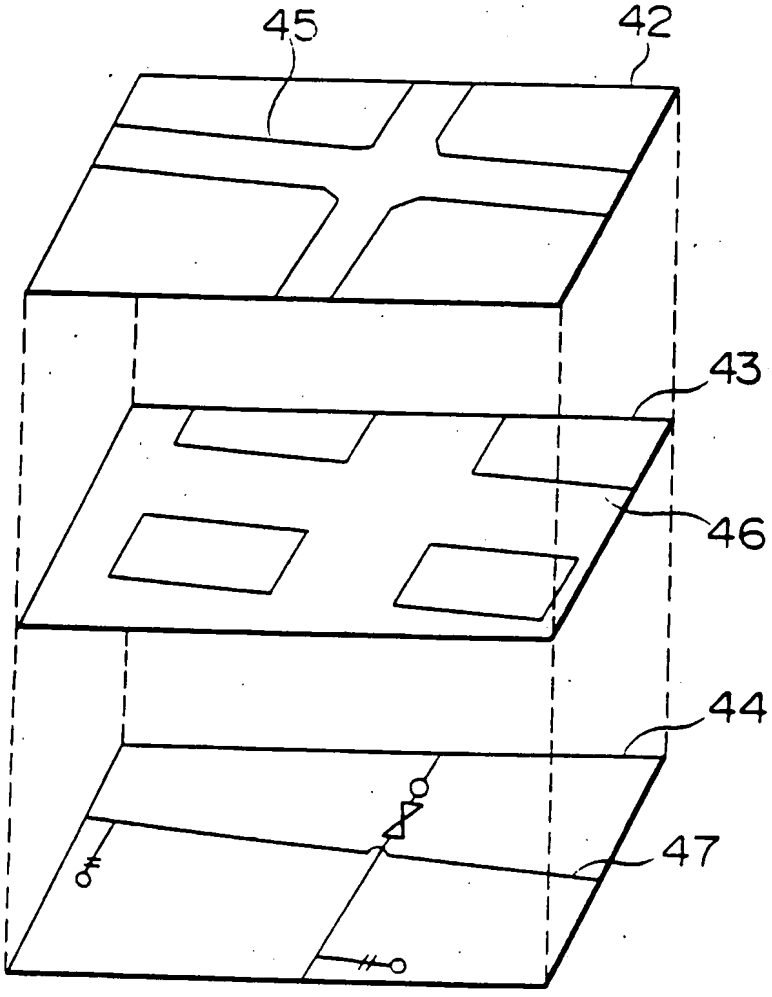


FIG. 5

10101	1
10102	3
10103	1
⋮	⋮
n	2

FIG. 6A

DRAWING DISPLAYED AT PRIORITY OF 1

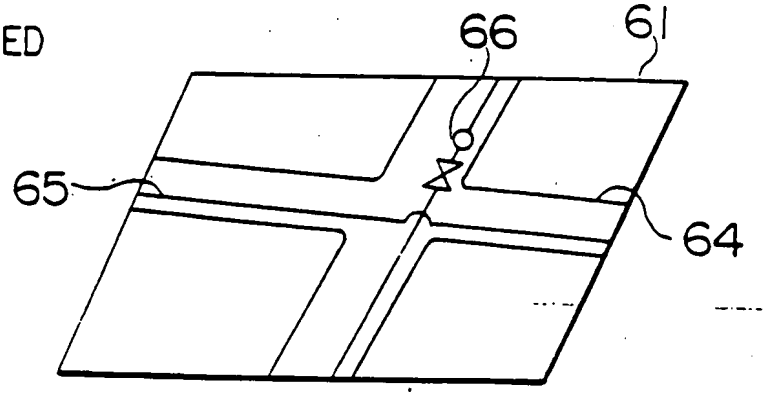


FIG. 6B

DRAWING DISPLAYED AT PRIORITY OF 2

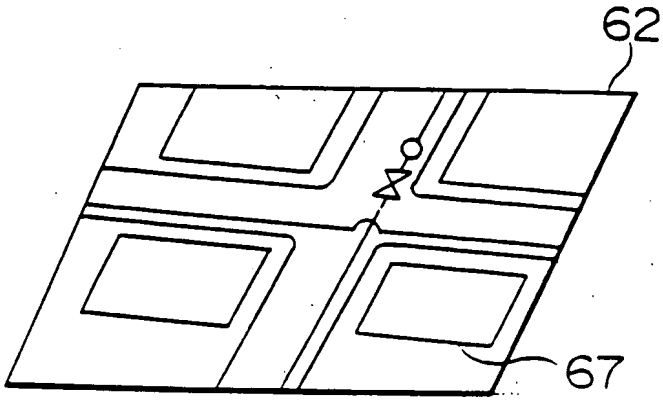


FIG. 6C

DRAWING DISPLAYED AT PRIORITY OF 3

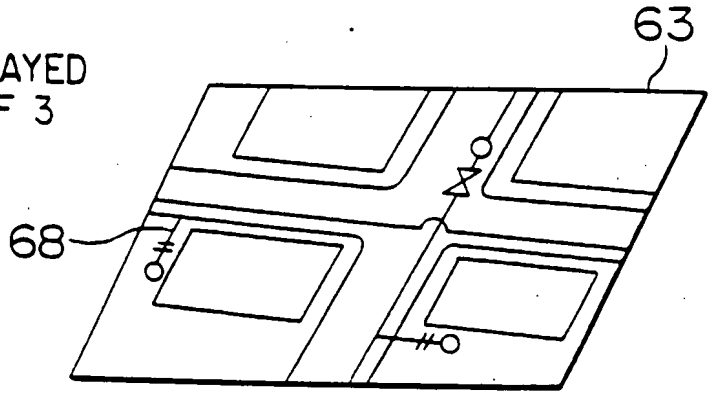


FIG. 7

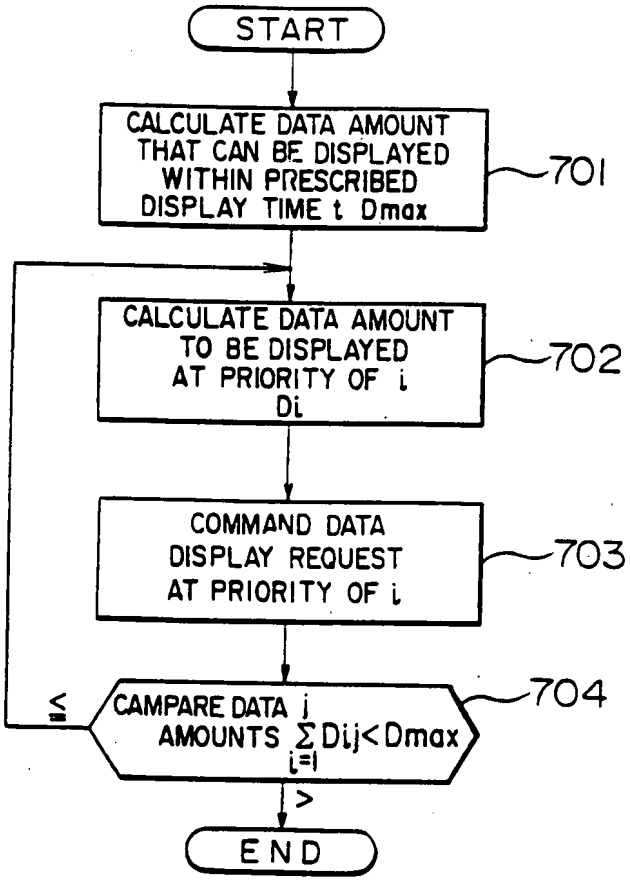

START
CALCULATE DATA AMOUNT THAT CAN BE DISPLAYED WITHIN PRESCRIBED DISPLAY TIME t Dmax
701
CALCULATE DATA AMOUNT TO BE DISPLAYED AT PRIORITY OF i Di
702
COMMAND DATA DISPLAY REQUEST AT PRIORITY OF i
703
CAMPARE DATA AMOUNTS $\sum_{i=1}^{j} Dij < Dmax$
704
≤
>
END

FIG. 8

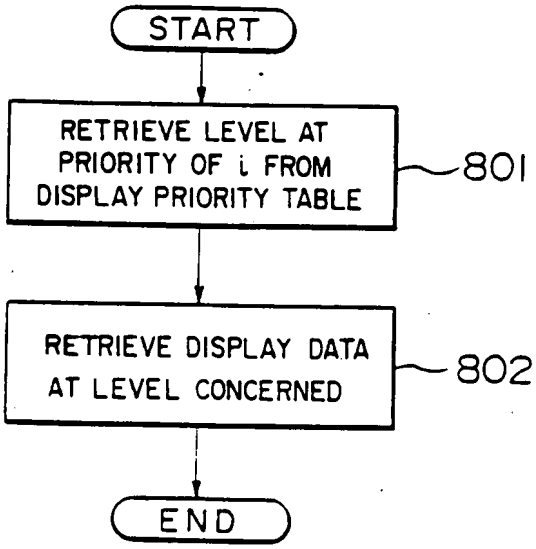

START
RETRIEVE LEVEL AT PRIORITY OF i FROM DISPLAY PRIORITY TABLE
801
RETRIEVE DISPLAY DATA AT LEVEL CONCERNED
802
END

FIG. 9A

TABLE OF GRAPHIC DATA CAPACITIES AT INDIVIDUAL LEVELS

GRAPHIC m

LEVEL NO.	GRAPHIC DATA CAPACITY
1	m_1

GRAPHIC b

GRAPHIC a

LEVEL NO.	GRAPHIC DATA CAPACITY
1	a_1
2	a_2
3	a_3
4	a_4
	b_n
n	a_n
Σ	$\sum_{i=1}^{n} a_i$

m_n

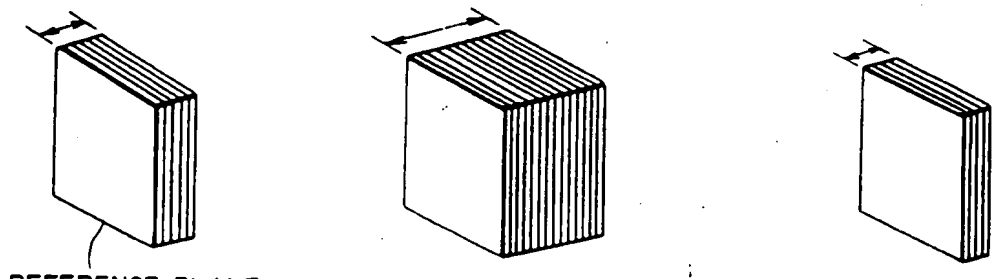
$\sum_{i=1}^{n} m_i$

$\sum_{i=1}^{n} m_i$

FIG. 9B

SHAPE OF CORRESPONDING ICON

DEPTH (CORRESPONDING TO DATA AMOUNT)



REFERENCE PLANE

GRAPHIC a GRAPHIC b --------- GRAPHIC m

FIG. 10

LEVEL NUMBER	SELECTION OF DISPLAY LAYER		CURRENT PRIORITY	AMOUNT OF CHANGING PRIORITY	PRIORITY AFTER HISTORY CHANGE
	ADDITION	CANCELLATION			
10101		O	1	+1	2
10102	O		3	-1	2
10103			1	0	1
10104	O		4	-1	3
------	------	------	------	------	------
n		O	2	+1	3

FIG. 11

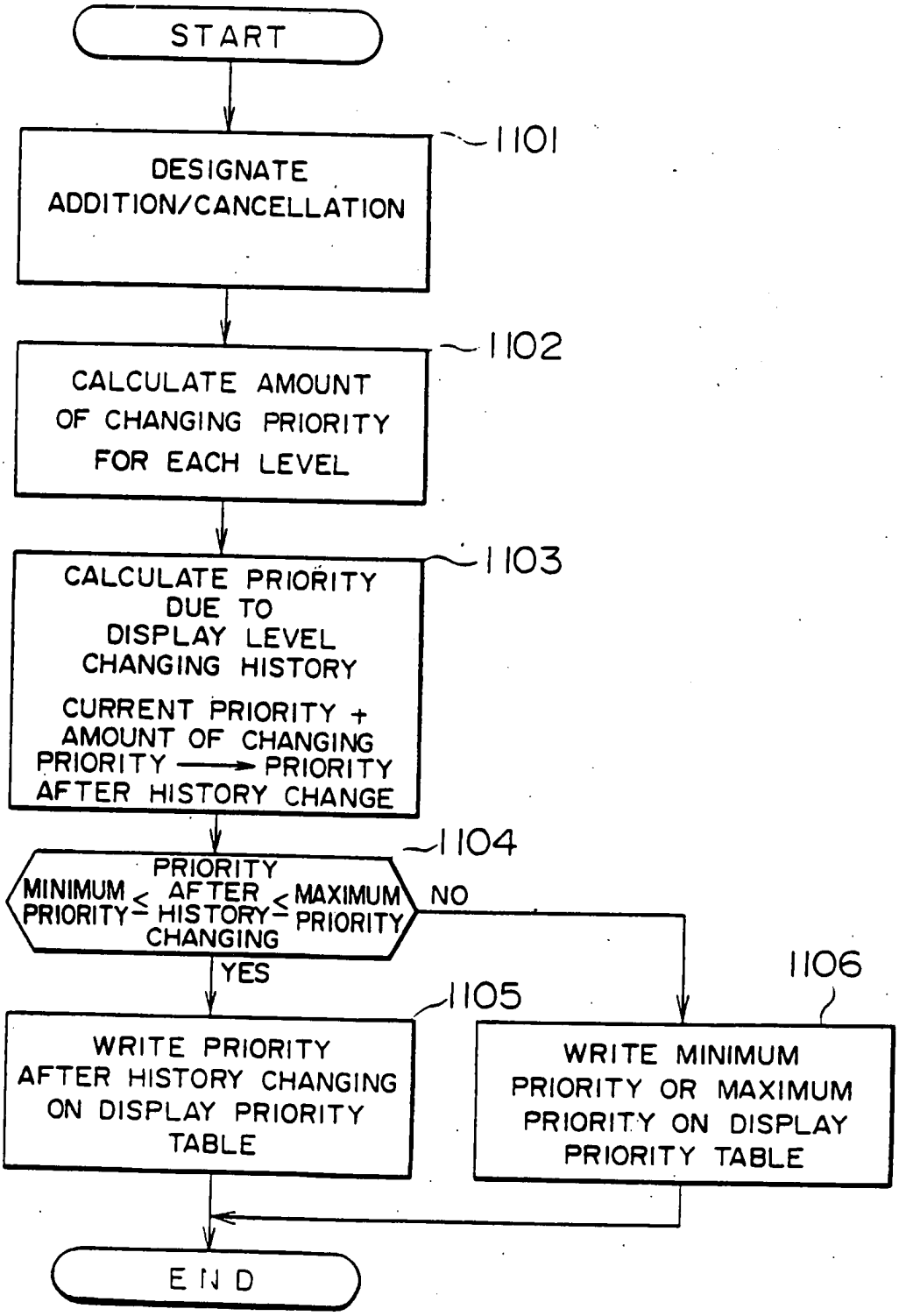
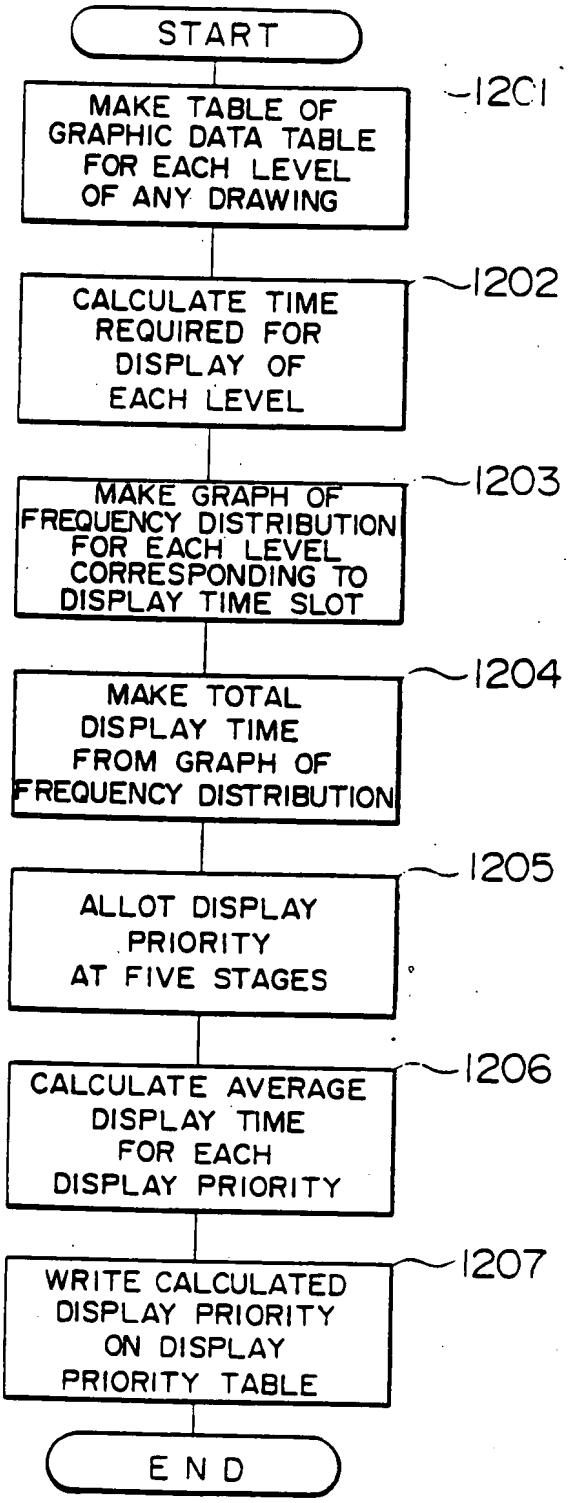

START
DESIGNATE ADDITION/CANCELLATION
1101
CALCULATE AMOUNT OF CHANGING PRIORITY FOR EACH LEVEL
1102
CALCULATE PRIORITY DUE TO DISPLAY LEVEL CHANGING HISTORY
CURRENT PRIORITY + AMOUNT OF CHANGING PRIORITY → PRIORITY AFTER HISTORY CHANGE
1103
MINIMUM PRIORITY ≤ PRIORITY AFTER HISTORY CHANGING ≤ MAXIMUM PRIORITY
1104
NO
YES
WRITE PRIORITY AFTER HISTORY CHANGING ON DISPLAY PRIORITY TABLE
1105
WRITE MINIMUM PRIORITY OR MAXIMUM PRIORITY ON DISPLAY PRIORITY TABLE
1106
END

FIG. 12


START
MAKE TABLE OF GRAPHIC DATA TABLE FOR EACH LEVEL OF ANY DRAWING
1201
CALCULATE TIME REQUIRED FOR DISPLAY OF EACH LEVEL
1202
MAKE GRAPH OF FREQUENCY DISTRIBUTION FOR EACH LEVEL CORRESPONDING TO DISPLAY TIME SLOT
1203
MAKE TOTAL DISPLAY TIME FROM GRAPH OF FREQUENCY DISTRIBUTION
1204
ALLOT DISPLAY PRIORITY AT FIVE STAGES
1205
CALCULATE AVERAGE DISPLAY TIME FOR EACH DISPLAY PRIORITY
1206
WRITE CALCULATED DISPLAY PRIORITY ON DISPLAY PRIORITY TABLE
1207
END

937439

FIG. 13A

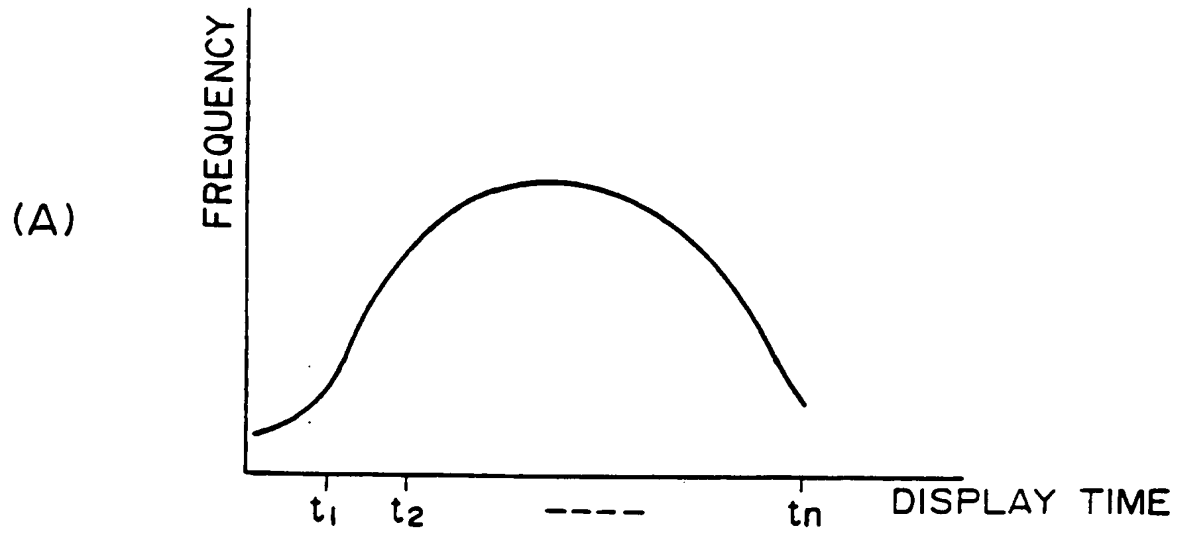
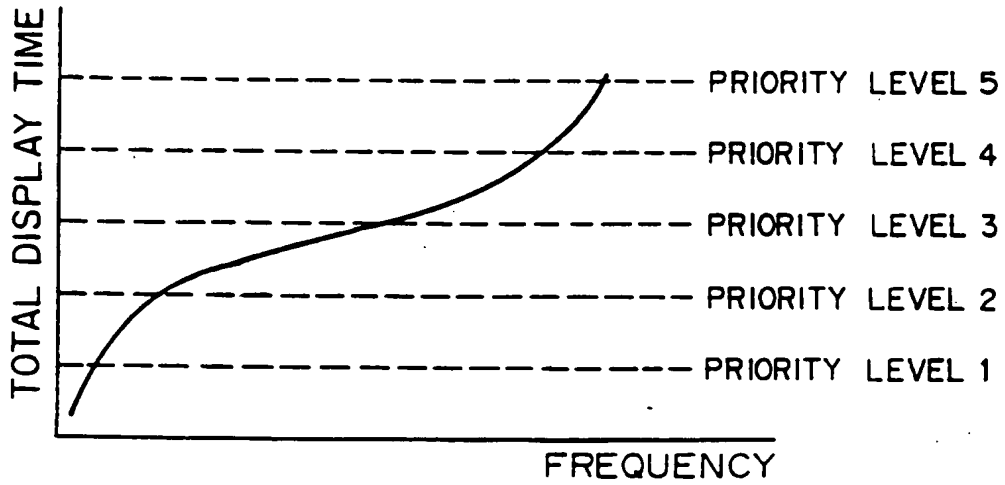



FIG. 13B